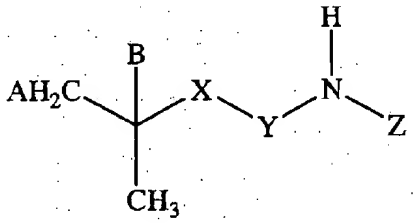
Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-34 (canceled)

35. (New) A sustained-release pharmaceutical composition comprising a single-layer core matrix of (1) a therapeutically effective amount of an active compound and (2) a gelling agent, wherein the amount of said active compound and gelling agent together is about 30-90% w/w of the composition, and wherein said active compound is selected from the group consisting of: isovaleric acid, a pharmaceutically acceptable salt of isovaleric acid, a pharmaceutically acceptable ester of isovaleric acid, a compound having the structure:



wherein A = H, CH_3 or OH,

B = H, OH, or CH_3,

X = CH_2, $CHCH_3$, $C(CH_3)_2$, -O-, CH(OH)-, or $-CH_2O-$,

Y = -CO-, or $-SO_2-$, and

Z = H, CH_2CO_2H, or CH_2CONH_2,

and a compound selected from the group consisting of isovaleramide, 2-methylisovaleramide, 3-methylisovaleramide, 2,2-dimethylisovaleramide, 2,3-dimethylisovaleramide, 4-methylisovaleramide, 2,4-dimethylisovaleramide, 3,4-dimethylisovaleramide, 2,2,4-trimethylisovaleramide, 3-hydroxyisovaleramide, 4-hydroxyisovaleramide, 4-hydroxy-3-methyl-isovaleramide, 2-hydroxyisovaleramide, N-(2-acetamido)isovaleramide, 2-methyl-1-

propyl sulfonamide, 1-methylethyl sulfamate, 2-methyl-1-propyl sulfamate, isopropyl carbamate, and isobutylcarbamate.

36. (New) A composition according to claim 35 wherein said composition is in a form suitable for oral administration.

37. (New) A composition according to claim 35, wherein said composition releases said active compound at a rate sufficient to maintain a therapeutically effective serum concentration of said active compound for at least 8 hours.

38. (New) A composition according to claim 35, wherein said composition releases said active compound at a rate sufficient to maintain a therapeutically effective serum concentration of said active compound for at least 12 hours.

C1 cont.

39. (New) A composition according to claim 35, wherein said gelling agent comprises xanthan gum.

40. (New) A composition according to claim 35, wherein said composition has a film-coating that retards access of liquids to the active compound and/or retards release of the active compound through the film-coating.

41. (New) A composition according to claim 35, further comprising one or more excipients to assist in formulation.

42. (New) A composition according to claim 35, wherein said active compound is isovaleramide.

43. (New) A composition according to claim 35, wherein said core matrix further comprises one or more excipients.

44. (New) A composition according to claim 40, wherein said film coating comprises a polymeric coating material.

45. (New) A composition according to claim 44, wherein said polymeric coating material comprises a mixture of ethyl cellulose and hydroxypropyl methylcellulose.

46. (New) A composition according to claim 44, wherein said polymeric coating material further comprises a plasticizer.

47. (New) A composition according to claim 35, wherein the composition is in the form of a tablet, capsule, or multiparticulate composition.

48. (New) A process for preparing a sustained-release pharmaceutical composition containing a single-layer core matrix of (1) a therapeutically effective amount of an active compound, (2) a gelling agent, and (3) optionally one or more substances that act to sustain release of the active compound, comprising:

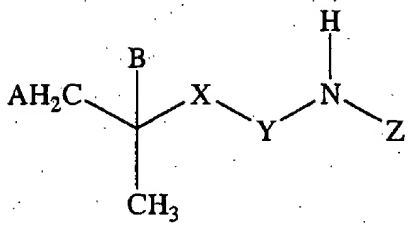
C1 cont.

(a) mixing together a therapeutically effective amount of an active compound with a gelling agent and optionally one or more substances that act to sustain release of the active compound, and

(b) compressing or extruding said active compound, gelling agent, and optional substances that act to sustain release of the active compound,

wherein the amount of said active compound and gelling agent together is about 30-90% w/w of the composition, and

wherein the active compound is selected from the group consisting of: isovaleric acid, a pharmaceutically acceptable salt of isovaleric acid, a pharmaceutically acceptable ester of isovaleric acid, an active compound having the structure:



wherein A = H, CH_3 or OH,

B = H, OH, or CH_3,

X = CH_2, $CHCH_3$, $C(CH_3)_2$, -O-, CH(OH)-, or $-CH_2O-$,

Y = -CO-, or $-SO_2-$, and

Z = H, CH_2CO_2H, or CH_2CONH_2,

and a compound selected from the group consisting of isovaleramide, 2-methylisovaleramide, 3-methylisovaleramide, 2,2-dimethylisovaleramide, 2,3-dimethylisovaleramide, 4-methylisovaleramide, 2,4-dimethylisovaleramide, 3,4-dimethylisovaleramide, 2,2,4-trimethylisovaleramide, 3-hydroxyisovaleramide, 4-hydroxyisovaleramide, 4-hydroxy-3-methyl-isovaleramide, 2-hydroxyisovaleramide, N-(2-acetamido)isovaleramide, 2-methyl-1-propyl sulfonamide, 1-methylethyl sulfamate, 2-methyl-1-propyl sulfamate, isopropyl carbamate, and isobutylcarbamate.

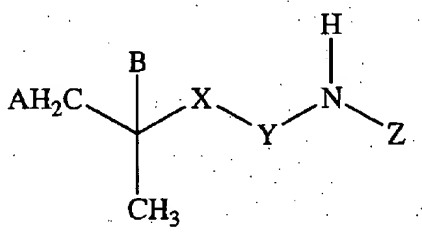
C1 cont.

49. (New) A process according to claim 48, wherein said gelling agent comprises xanthan gum.

50. (New) A process according to claim 48, further comprising the step of coating the core matrix with a polymer solution to form a film-coating.

51. (New) A method of treating a pathology that is ameliorated by a modulation of CNS activity, comprising administering to a patient suffering from said pathology a sustained-release pharmaceutical composition comprising a single-layer core matrix of (1) a therapeutically effective amount of an active compound and (2) a gelling agent, wherein the

amount of said active compound and gelling agent together is about 30-90% w/w of the composition, and wherein said active compound is selected from the group consisting of: isovaleric acid, a pharmaceutically acceptable salt of isovaleric acid, a pharmaceutically acceptable ester of isovaleric acid, isovaleramide, a compound having the structure:



wherein A = H, CH_3 or OH,

B = H, OH, or CH_3,

X = CH_2, $CHCH_3$, $C(CH_3)_2$, -O-, CH(OH)-, or $-CH_2O-$,

Y = -CO-, or $-SO_2-$, and

Z = H, CH_2CO_2H, or CH_2CONH_2,

and a compound selected from the group consisting of 2-methylisovaleramide, 3-methylisovaleramide, 2,2-dimethylisovaleramide, 2,3-dimethylisovaleramide, 4-methylisovaleramide, 2,4-dimethylisovaleramide, 3,4-dimethylisovaleramide, 2,2,4-trimethylisovaleramide, 3-hydroxyisovaleramide, 4-hydroxyisovaleramide, 4-hydroxy-3-methyl-isovaleramide, 2-hydroxyisovaleramide, N-(2-acetamido)isovaleramide, 2-methyl-1-propyl sulfonamide, 1-methylethyl sulfamate, 2-methyl-1-propyl sulfamate, isopropyl carbamate, and isobutylcarbamate,

with the proviso that the treated pathology is not convulsions when the compound is 3-methylisovaleramide, isopropyl carbamate, or isobutyl carbamate.

C' cont.

52. (New) A method according to claim 51, wherein said sustained-release pharmaceutical composition is in tablet form and the tablet contains a therapeutically effective unit dose of the active compound.

53. (New) A method according to claim 51, wherein said sustained-release pharmaceutical composition is a multiparticulate composition and the multiparticulate composition contains a therapeutically effective unit dose of the active compound.

54. (New) A composition according to claim 51, wherein said gelling agent comprises xanthan gum.

55. (New) A method according to claim 54 wherein said composition further comprises a film-coating comprising a polymeric coating material.

C1 cont.

56. (New) A method according to claim 51, wherein said pathology is selected from the group consisting of convulsions, spasticity, affective mood disorder, neuropathic pain syndrome, headache, restlessness syndrome, movement disorder substance abuse/craving, and cerebral trauma.

57. (New) A method according to claim 51, wherein said active compound is isovaleramide.

58. (New) A method according to claim 51, wherein said active compound is released in an amount that produces an anxiolytic effect, said patient is a human, and said pathology is mild anxiety, symptoms of smoking cessation, alcoholism and other substance abuse, premenstrual syndrome, menstrual discomfort, insomnia, and hyperexcitability in children.

C1 cancel.

59. (New) A method according to claim 51, wherein said patient is a domestic or domesticated animal, and said active compound is released in an amount that produces an anxiolytic effect.